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PB
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IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Withdrawn) A gene encoding a protein from merozoite of *Babesia caballi*.

Claim 2 (Withdrawn) The gene of claim 1 wherein said protein is a protein that has the amino acid sequence shown in SEQ ID NO: 2, or a protein that has the amino acid sequence shown in SEQ ID NO: 2 with one to several amino acid residues therein being deleted, substituted or added and that is immunologically reactive with an antibody or antiserum elicited by a 48kDa protein of rhoptry of *Babesia caballi* merozoite.

Claim 3 (Withdrawn) The gene of claim 1 or 2 wherein said gene has the nucleotide sequence shown in SEQ ID NO: 1, or has a nucleotide sequence that hybridizes to a complementary sequence to the nucleotide sequence shown in SEQ ID NO: 1 and encodes a protein that is immunologically reactive with an antibody or antiserum elicited by a 48kDa protein of rhoptry of *Babesia caballi* merozoite.

Claim 4 (Currently Amended) An isolated recombinant protein from merozoite of *Babesia caballi*, wherein said protein is expressed in a host cell transformed with a DNA vector into which cDNA having the nucleotide sequence encoding the amino

acid sequence as shown in SEQ ID NO: 2, or cDNA having the nucleotide sequence encoding the amino acid sequence as shown in SEQ ID NO: 2 with one to several amino acid residues therein being deleted, substituted or added, is incorporated into the DNA vector.

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Claim 5 (Previously Presented) The isolated recombinant protein of claim 4, wherein said protein ^{recombinant} binds to ^X reactive with an antibody or antiserum elicited by a 48kDa obtained from horses infected with protein of rhoptry of Babesia caballi merozoite.

Claim 6 (Cancelled)

Claim 7 (Withdrawn) Lysogenic bacteria with recombinant phage expressing a 48kDa protein of rhoptry of Babesia caballi merozoite, which is prepared by infecting E. coli with phage into which cDNA having the nucleotide sequence encoding the amino acid sequence shown in SEQ ID NO: 2 is incorporated.

Claim 8 (Withdrawn) An antibody capable of binding to a 48kDa protein of rhoptry of Babesia caballi merozoite.

Claim 9 (Withdrawn) The antibody of claim 8 wherein said protein is a naturally occurring protein or a recombinant protein.

Claim 10 (Withdrawn) The antibody of claim 8 or 9 wherein said antibody is a monoclonal antibody.

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Claim 11 (Previously Presented) An antigen comprising the recombinant protein from merozoite of *Babesia caballi* as set forth in claim 4.

Claim 12 (Withdrawn) A method for diagnosing equine babesiosis which comprises specifically detecting anti-*Babesia caballi* antibody present in equine blood by using the antigen as set forth in claim 11.

Claim 13 (Withdrawn) A method for diagnosing equine babesiosis which comprises detecting the presence of *Babesia caballi* merozoite in equine blood by using the antibody capable specifically binding to a 48kDa protein of rhoptry of *Babesia caballi* merozoite.